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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,125	12/04/2001	Robert L. Canella	3481.1US (MUEI-0399.01/US)	4166
24247	7590	06/18/2004	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			JOHNSON, JONATHAN J	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/007,125

Applicant(s)

CANELLA ET AL.

Examiner

Jonathan Johnson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 12-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 64-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-67 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-20-04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 and 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al. (4,030,622) in view of Sauter et al. (5,911,461) and Delfino et al. (4,415,794). Brooks et al. teach a transport actuator for receiving a plurality of trays of an IC package (Figure 1, Items 190 and 182); an input and output shuttle assembly for providing the trays of IC packages to and from the tray carrier (Figure 1, Items 180 and 214); and a laser marking station disposed adjacent a portion of the transport actuator between the input and output shuttle assembly (column 6, Line 36); and further including a lifting device extendable to contact the tray carrier at a location remote from the fulcrum (Figure 7, item 22); wherein the tray transport is of lesser longitudinal extent than the tray carrier (Figure 4, item 1) wherein the lifting device is extendable from a location below the tray carrier and adjacent a longitudinal end of the tray transport. (Figure 7, Item 22). Sauter et al. teach a tray carrier unsecured to the transporter wherein an upper surface of the tray transport and a lower surface of the tray carrier include mutually cooperative physical structures. The system of claim 3, wherein the mutually cooperative physical structures are adapted to align the tray carrier on the tray transport when the tray carrier is disposed thereon, wherein portions of the mutually cooperative physical

Art Unit: 1725

structures provide a fulcrum for tilting of the tray carrier with respect to the tray transport; wherein the tray transport is rectangular, but for a corner severed therefrom adjacent the fulcrum (abstract and column 2, lines 25-60, figure 4, item 1 edge; a); wherein the tray carrier is substantially rectangular and includes a substantially planar upper surface having upwardly extending stops at each corner thereof (Figure 4, item 1); wherein the tray carrier includes a portion of reduced width defined by mutually longitudinally coextensive elongated notches in parallel sides thereof (Figure 4, item 1 edge); wherein the tray carrier includes a plurality of downwardly facing notches in the two parallel sides thereof (Figure 4, item 1) wherein the plurality of downwardly facing notches comprises two notches on each of the two parallel sides of the tray carrier (Figure 4, item 1). Delfino et al. teach scanning a laser on a wafer (col. 1, ll. 5-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Brooks et al. to utilize a tray for the wafer in order to reduce the danger of damage by reducing the surface area of the wafer contacting the carrier (Sauter et al; column 1, lines 40-50) and further to modify the combined invention of Brooks et al. and Sauter et al. to utilize a laser in order to remove ion implantation damage (Delfino et al., col. 1, ll. 15-30).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-11 and 64-67 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1725

Applicant argues Brooks does not teach a transport actuator that receives trays of IC packages as Brooks teaches loading individual wafers directly onto a tongue or track. The examiner agrees. First, the examiner would like to point out that In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant is reminded that the recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

The examiner recognizes that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (Claims were directed to a process of producing a porous article by expanding shaped, unsintered, highly crystalline poly(tetrafluoroethylene) (PTFE) by stretching said PTFE at a 10% per second rate to more than five times the original length. The prior art teachings with regard to unsintered PTFE indicated the material does not respond to conventional plastics processing, and the material should be stretched slowly. A reference teaching rapid stretching of conventional plastic polypropylene with reduced crystallinity

Art Unit: 1725

combined with a reference teaching stretching unsintered PTFE would not suggest rapid stretching of highly crystalline PTFE, in light of the disclosures in the art that teach away from the invention, i.e., that the conventional polypropylene should have reduced crystallinity before stretching, and that PTFE should be stretched slowly.). In the instant case, the examiner does not believe that the teachings of Brooks, when considered in its entirety, teaches away from Sauter et al. While it is true that Brooks stresses the desirability of maintaining a seal around the penetration point of the housing, Brooks is concerned with conveyor belts and rotary carousels, not necessarily tray carriers (see Brooks col. 1, ll. 40-50). Brooks solves the problem caused by the belts and carousels by using a vibrating track to move the wafer into the chamber. Sauter et al. on the other hand, involves preventing damage to wafer by limiting its contact to a carrier. The examiner would like to note that this solves a completely different problem than addressed by Brooks. Therefore, as stated in the 103 rejection, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Brooks et al. to utilize a tray for the wafer in order to reduce the danger of damage by reducing the surface area of the wafer contacting the carrier (Sauter et al; column 1, lines 40-50) and further to modify the combined invention of Brooks et al. and Sauter et al. to utilize a laser in order to remove ion implantation damage (Delfino et al., col. 1, ll. 15-30).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177.

The examiner can normally be reached on M-Th 7AM-5:30 PM.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Johnson  
Examiner  
Art Unit 1725